

Re-envisioning the Family Medicine of the Future

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UNIVERSITY OF WISCONSIN

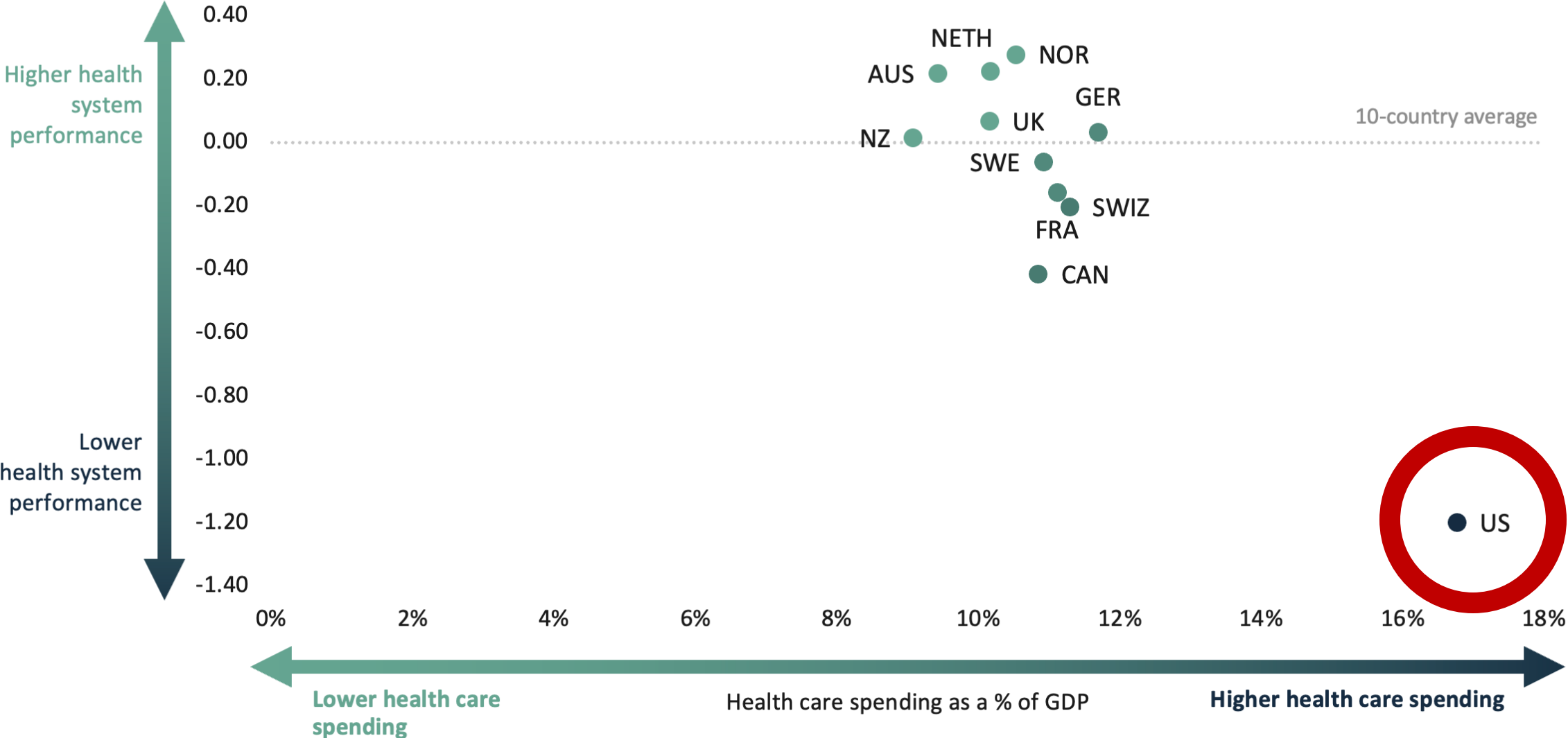
SCHOOL OF MEDICINE AND PUBLIC HEALTH



America has a \$4.2 Trillion dollar health care system that does not produce health!

This is not an effective system and certainly isn't healthy

Health Care System Performance Compared to Spending



Note: Health care spending as a percent of GDP. Performance scores are based on standard deviation calculated from the 10-country average that excludes the US. See How We Conducted This Study for more detail.
Data: Spending data are from OECD for the year 2019 (updated in July 2021).

The Risk of a “Pill-Centric Model”

35.6% of Americans 65 and over are on 5 drugs or more (polypharmacy)

In the NHANES Cohort, **18.5%** of patients taking medication for HTN were also on medications that cause HTN

Vitarello JA, et al. Prevalence of Medications That May Raise Blood Pressure Among Adults With Hypertension in the United States. JAMA Int Med. Nov 22nd, 2021.

Drug Classes with Anti-cholinergic effects

- Pretty much any anti-spasmodic (bladder spasm, intestinal spasm)
- Muscle relaxers
- Tricyclic antidepressants
- First generation anti-histamines
- Anti-vertigo and Anti-emetics
- Anti-psychotics
- Anti-arrhythmic
- Anti-parkinsonians

Hazard Ratio:
1.54 for dementia
for highest doses

Gray SL, Anderson ML, Dublin S, et al. Cumulative Use of Strong Anticholinergics and Incident Dementia: A Prospective Cohort Study. JAMA internal medicine 2015

Asking different questions....

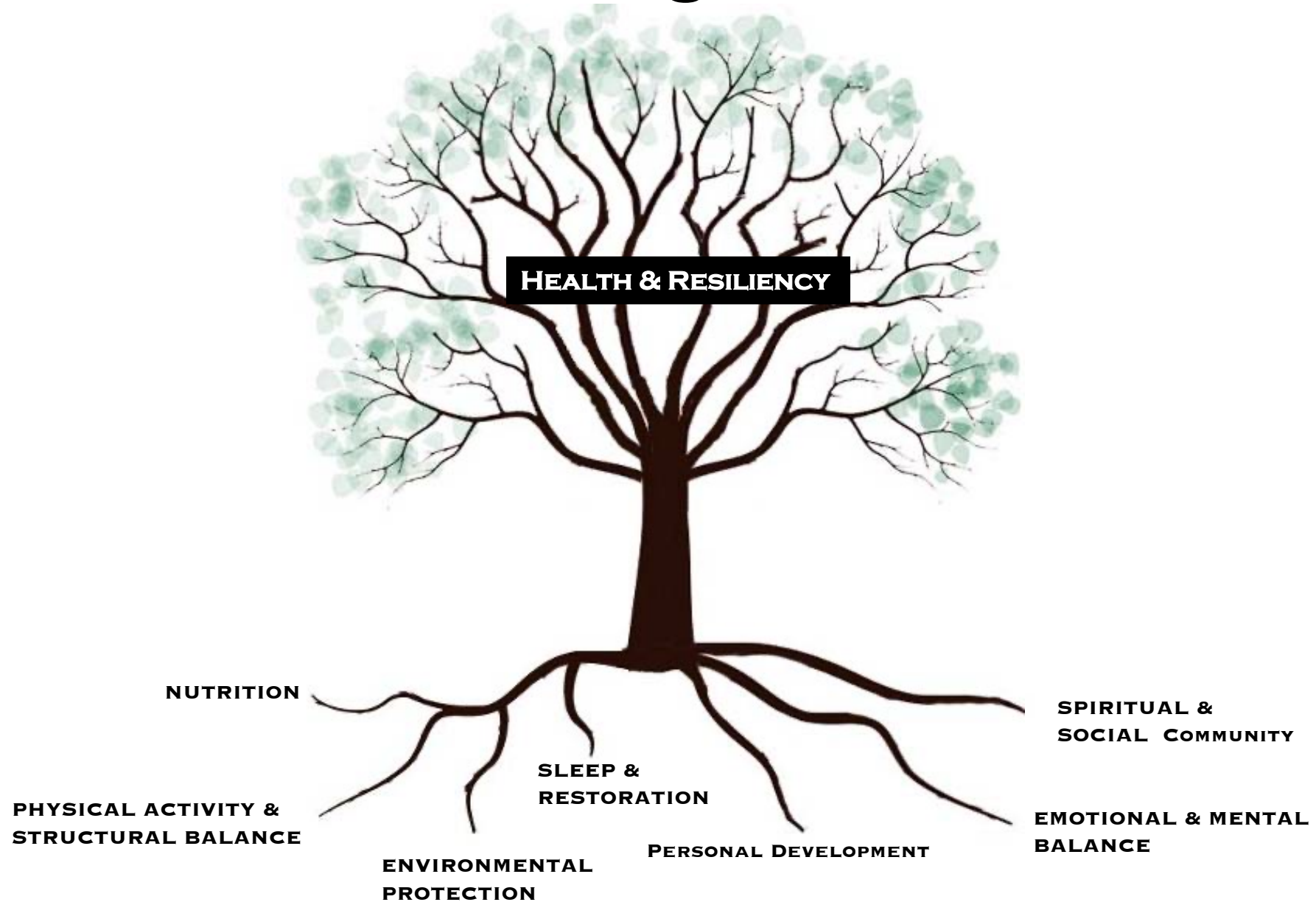
Asking Patients...

- What is right with you vs what is wrong with you? (Focus on Assets not deficiencies)

Asking Clinicians...

- Are you a master of widgets or a facilitator of health?
- Do you take care of problems or people?

Salutogenesis



"Give your throat a vacation...

Smoke a
FRESH
cigarette"

If the cigarette you have been smoking stings or burns your throat, switch to Camels and see the difference.

It's the peppery dust left in tobacco by inefficient cleaning methods that makes you cough.

It's the unkindly hot smoke of harsh, dried-out tobacco that burns and irritates your throat.

There is no peppery dust in Camels—that's whisked away by a special vacuum-cleaning process.

There are no stale, crumbly, parched tobaccos—the fine Turkish and mild Domestic tobaccos of which Camels are blended come to you in prime, factory-fresh condition, thanks to the Humidor Pack.

This scientific germ-safe wrapping—not plain ordinary Cellophane, but moisture-

proof Cellophane which costs nearly twice as much—seals in all the natural aroma and freshness, seals it so tightly that wet weather cannot make Camels damp, nor drought weather make them dry.

Camels are milder and more throat-friendly because they are dust-free and fresh.

Give your throat a vacation, switch to Camels for just one day. Then leave them—if you can.

There is CAMEL QUARTER HOUR Smoking Machine, Brevary and Four Ways to Camel Cigarettes, American Jockey Brand — Columbia, Boston — every night except Sunday

Don't remove the moistureproof wrapping from your package of Camels after you open it. The Humidor Pack is protection against dust and germs. In offices and homes, even in the dry atmosphere of artificial heat, the Humidor Pack delivers fresh Camels and keeps them right until the last one has been smoked.

CAMELS
Mild... NO CIGARETTE AFTER-TASTE



Confirmation Bias



Conformation Bias

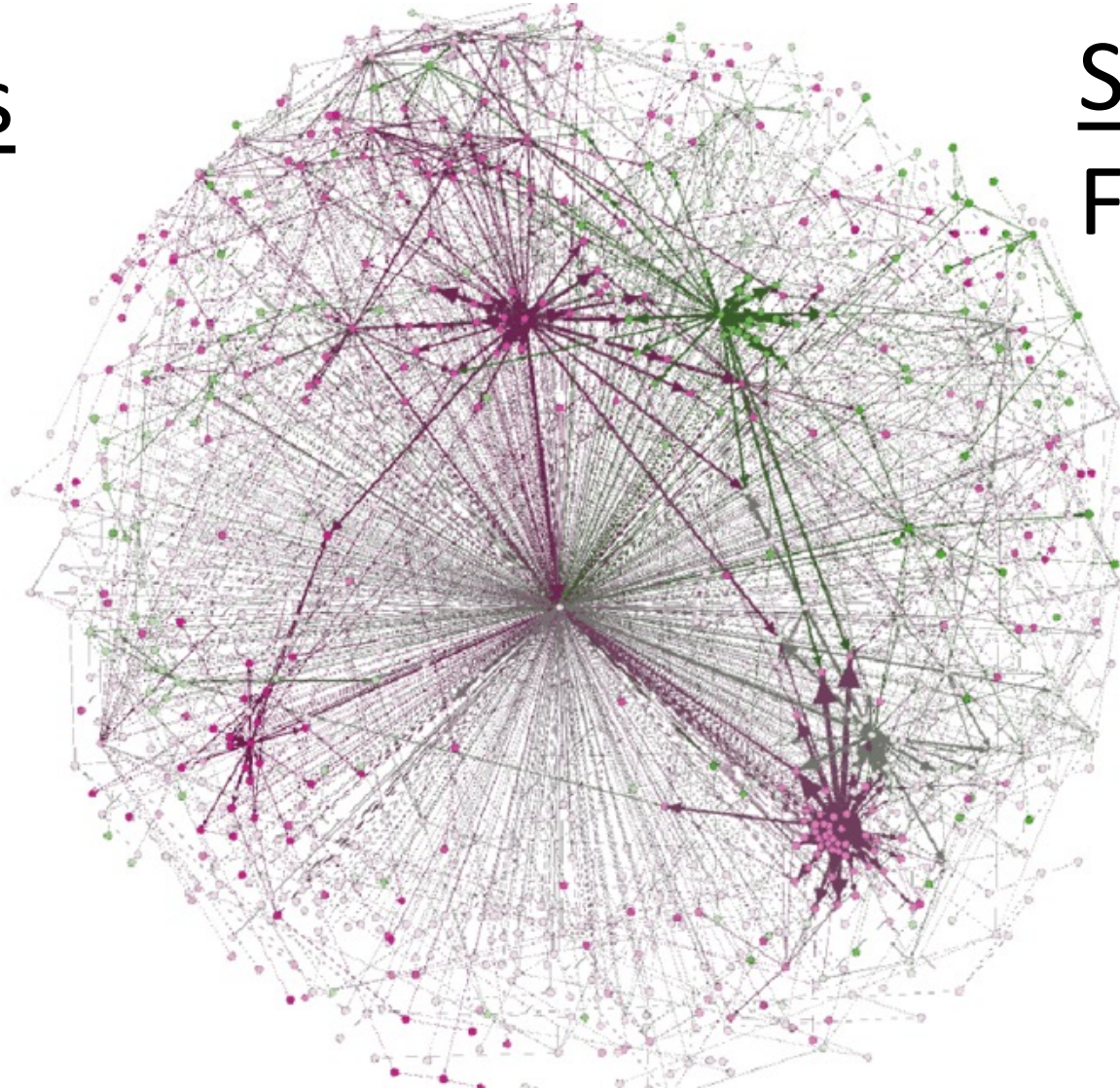
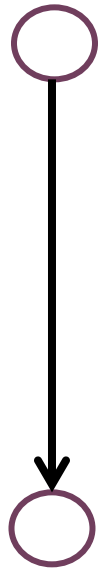
Candid Camera: Social Conformation



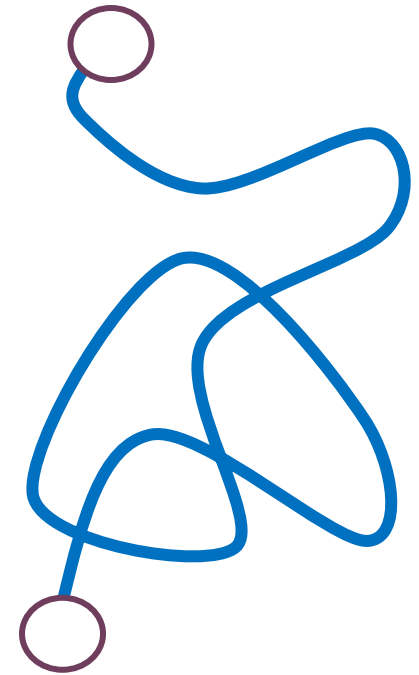
Conformation Bias... Conforming to Established Cultures

Network Science Guides Salutogenic Science

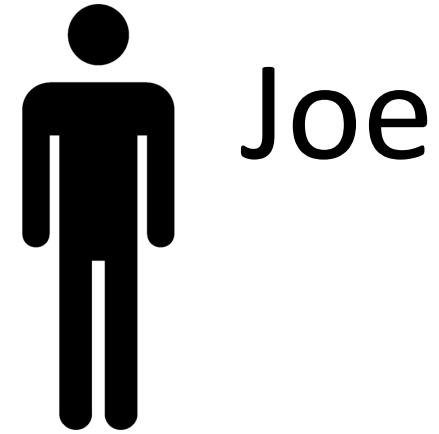
Pathogenesis
Take This Pill



Salutogenesis
Find this Pattern



Pill or Process?



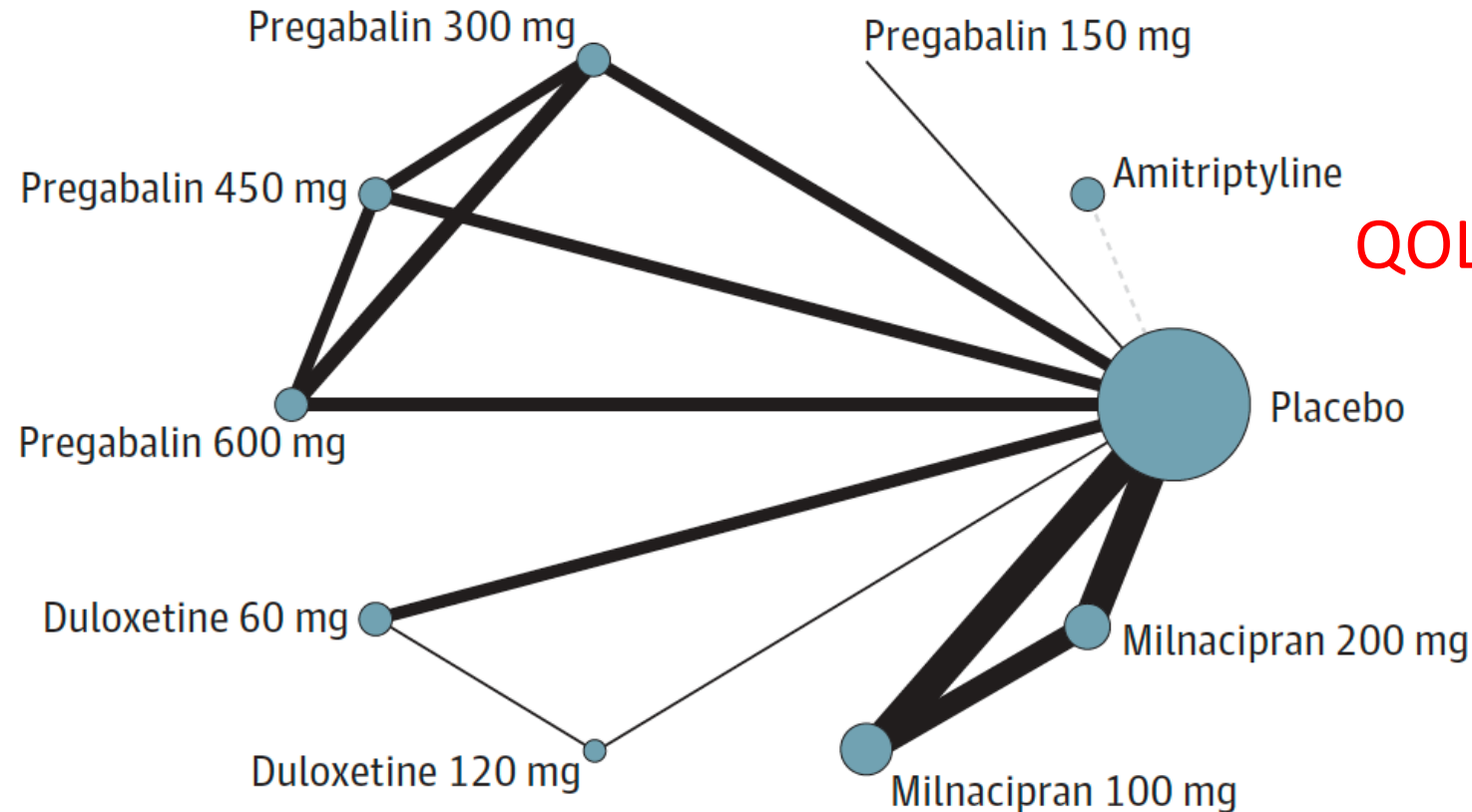
56 yo male with severe low back pain
for 7 mths, Recent divorce, no red flags

New Term: **Nociplastic Pain**

Fitzcharles, M.-A., et al. Nociplastic pain: towards an understanding of prevalent pain conditions. The Lancet 397, 2098–2110. 2021

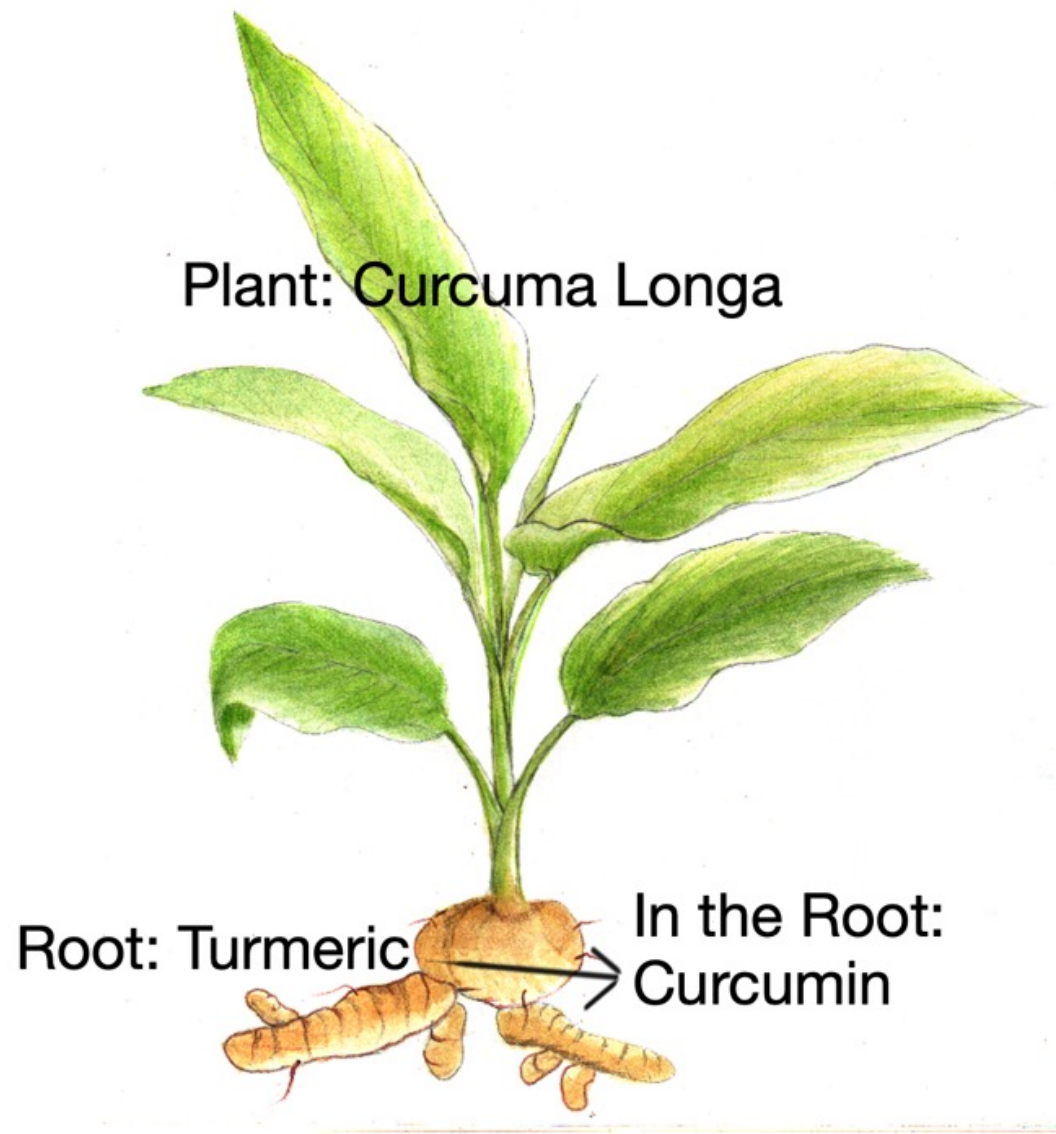
Network Meta-Analysis: Rx Treatment for Fibromyalgia

A Pain outcome network diagram



FM Pain: #1 Duloxetine 120 mg
#2 Pregabalin 450 mg

QOL, Sleep, Pain, Tolerability:
#1 Amitriptyline



- 500 mg BID with 20% Curcuminoids (Can go up to 2 gms BID)
- Dose with pepper (piperine)
- 10% reduction in pain with improved function compared to placebo after 12 weeks
- No reduction in synovial swelling on MRI

Open Label Placebo for LBP

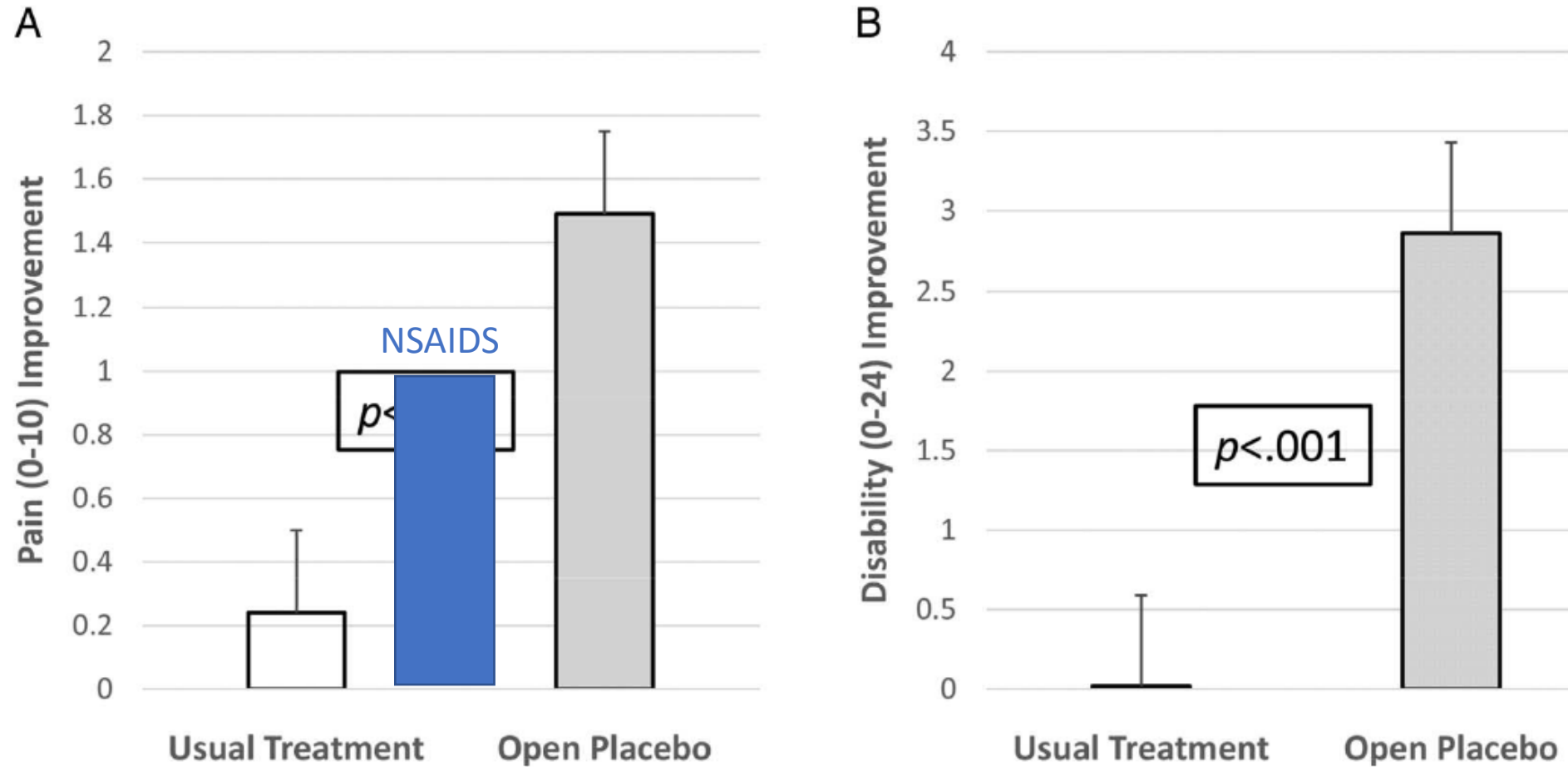
Patient Education

- 1, The placebo effect can be powerful
- 2, The body can respond to placebo similar to Pavlov's dog
- 3, A positive attitude can be helpful and..
- 4, Taking the pills faithfully for 21 days is critical



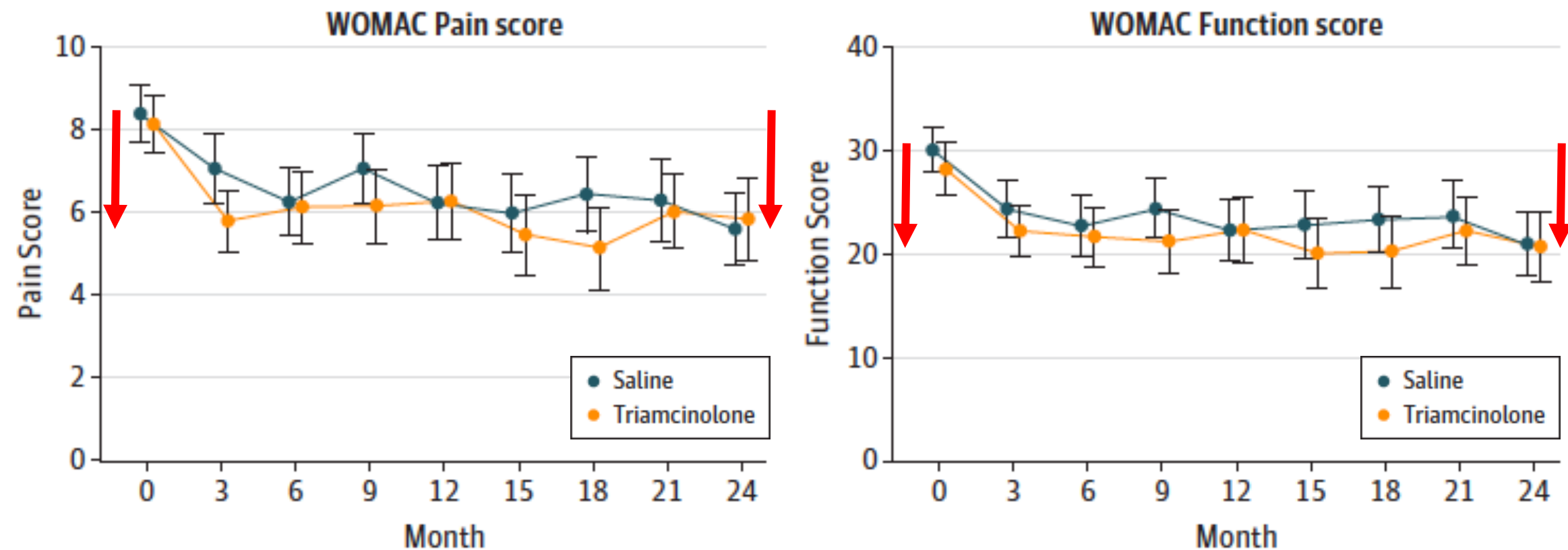
Carvalho C, et al. Open-label placebo treatment in chronic low back pain: a randomized controlled trial. Pain. October, 2016.

Open Label Placebo for LBP



Carvalho C, et al. Open-label placebo treatment in chronic low back pain: a randomized controlled trial. Pain. October, 2016.

Figure 2. Pain and Function Scores of Patients With Knee Osteoarthritis Treated With Triamcinolone vs Saline



McAlindon TE, LaValley MP, Harvey WF, et al. Effect of Intra-articular Triamcinolone vs Saline on Knee Cartilage Volume and Pain in Patients With Knee Osteoarthritis: A Randomized Clinical Trial. JAMA 2017;317:1967-75.

A shot, a cream or a pill?

Mode of therapy and placebo.

- 149 studies
- OA of Knee
- 3 mth duration



>



>



Placebo cream = Tylenol
Placebo injection > Tylenol

Self-healing:
Regression to the
Mean

Power of
Medication
(Steroid or NSAID)

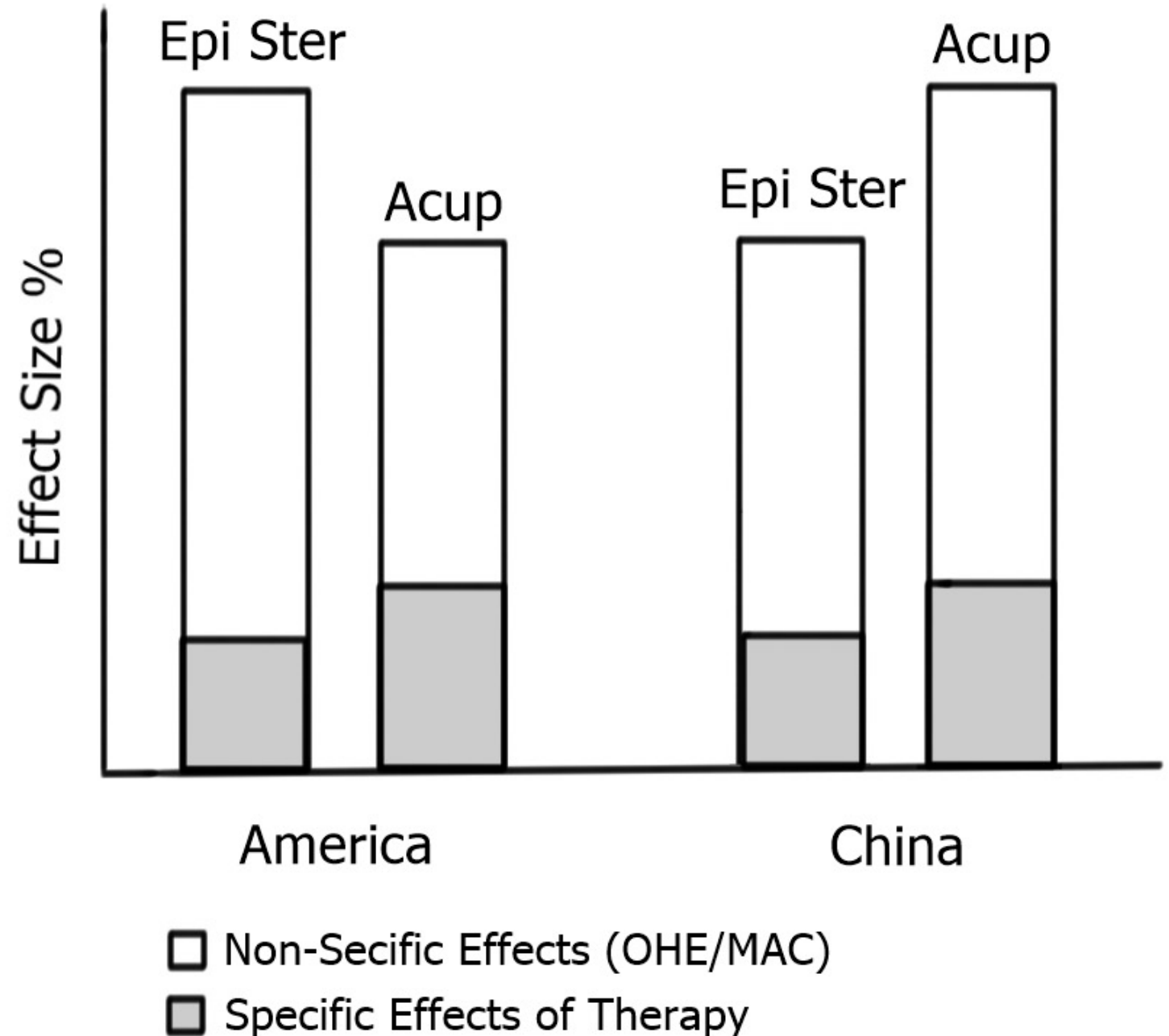
Mode of Therapy
(Shot, Cream, Pill)

Therapeutic
Relationship
(clinician and
patient)

↑ Accumulative Power and Effect Size: Practical Significance

Site, Setting, Expectancy & Context Matters

Thomas KJ, et al. Randomized controlled trial of short course of traditional acupuncture compared with usual care for persistent non-specific low back pain. BMJ. 23;333(7569):623. 2006



Why don't these people get “whiplash” neck pain?

Public = 10%

Derby = 0.25%



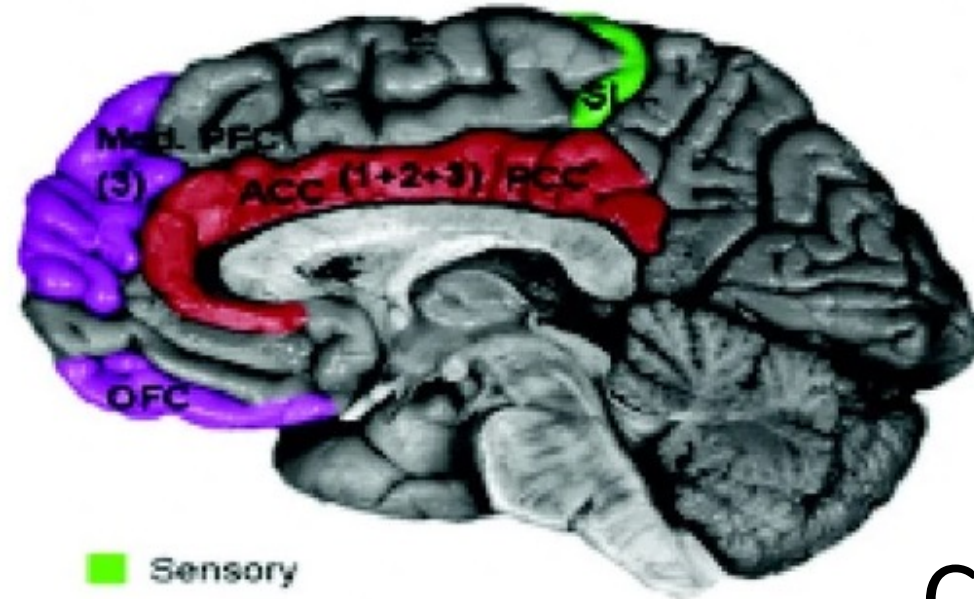
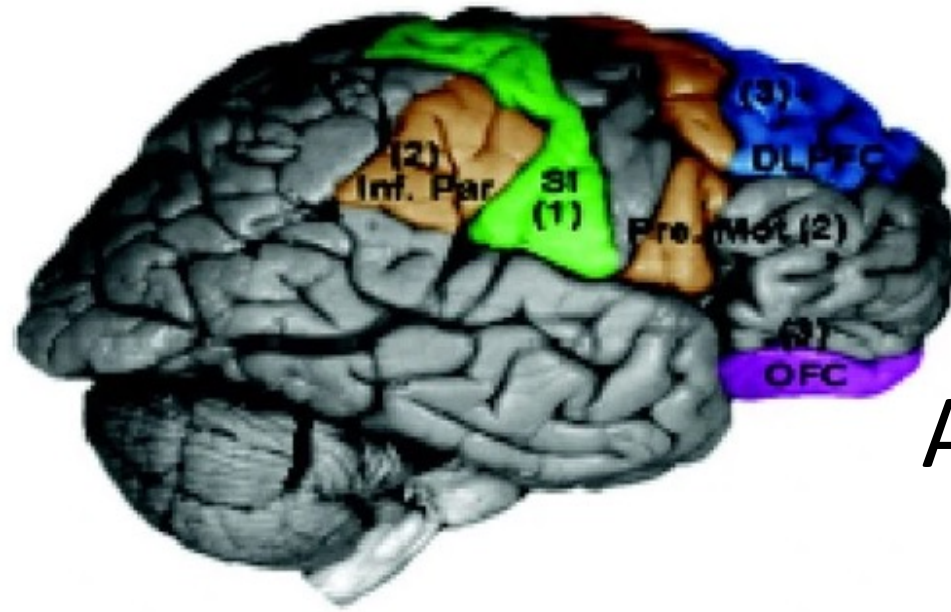
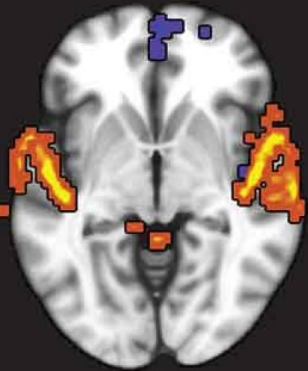
Simotas, et al. Neck pain in demolition derby drivers. *Archives of Physical Medicine and Rehabilitation*. 86: 693-696. 2005

*“The sorrow that hath no vent in tears
may make other organs weep.”*

-Henry Maudsley

1. Hsu MC, Schubiner H, Lumley MA, Stracks JS, Clauw DJ, Williams DA. Sustained pain reduction through affective self-awareness in fibromyalgia: a randomized controlled trial. *Journal of general internal medicine* 2010;25:1064-70.

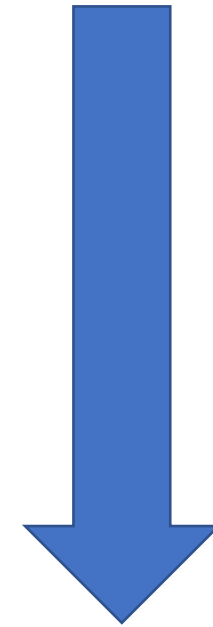
2. Lumley MA, Schubiner H. Emotional Awareness and Expression Therapy for Chronic Pain: Rationale, Principles and Techniques, Evidence, and Critical Review. *Curr Rheumatol Rep* 2019;21:30.



■ Sensory
■ Affective

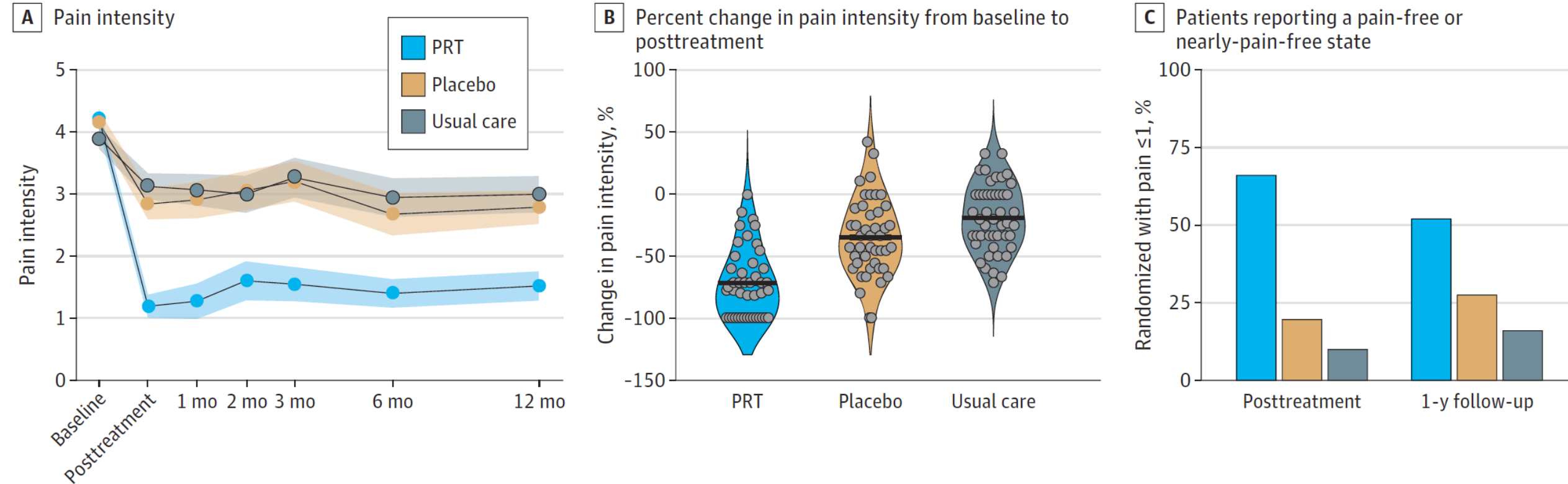
Chronic Low Back Pain
Cost = \$600 Billion/year

Acute: Sensory



Chronic: Affective

Nociplastic Pain: Pain Reprocessing Therapy



Ashar, Y.K., et al., *Effect of Pain Reprocessing Therapy vs Placebo and Usual Care for Patients With Chronic Back Pain: A Randomized Clinical Trial*. JAMA Psychiatry, 2022. **79**(1): p. 13-23.

Pain Reprocessing Therapy

- **Educate** about chronic, nociplastic pain that is centrally located
 - ✓ Similar to Open Label Placebo
 - **Practice Mindfulness**
 - ✓ Turn towards your pain and be with it, in the present moment, on purpose, without judgement
 - ✓ Self-compassion
 - **Reduce Fear**
 - ✓ Pain is real but bodily injury is not a risk
 - ✓ Similar to PTSD treatment, the injury or stressful situation is no longer present
 - ✓ De-sensitize. Increase confidence of what the body can do without pain
 - ✓ Give suffering an avenue for expression
- 8, one-hour sessions, twice weekly for 4 weeks

Ashar, Y.K., et al., *Effect of Pain Reprocessing Therapy vs Placebo and Usual Care for Patients With Chronic Back Pain: A Randomized Clinical Trial*. JAMA Psychiatry, 2022. **79**(1): p. 13-23.

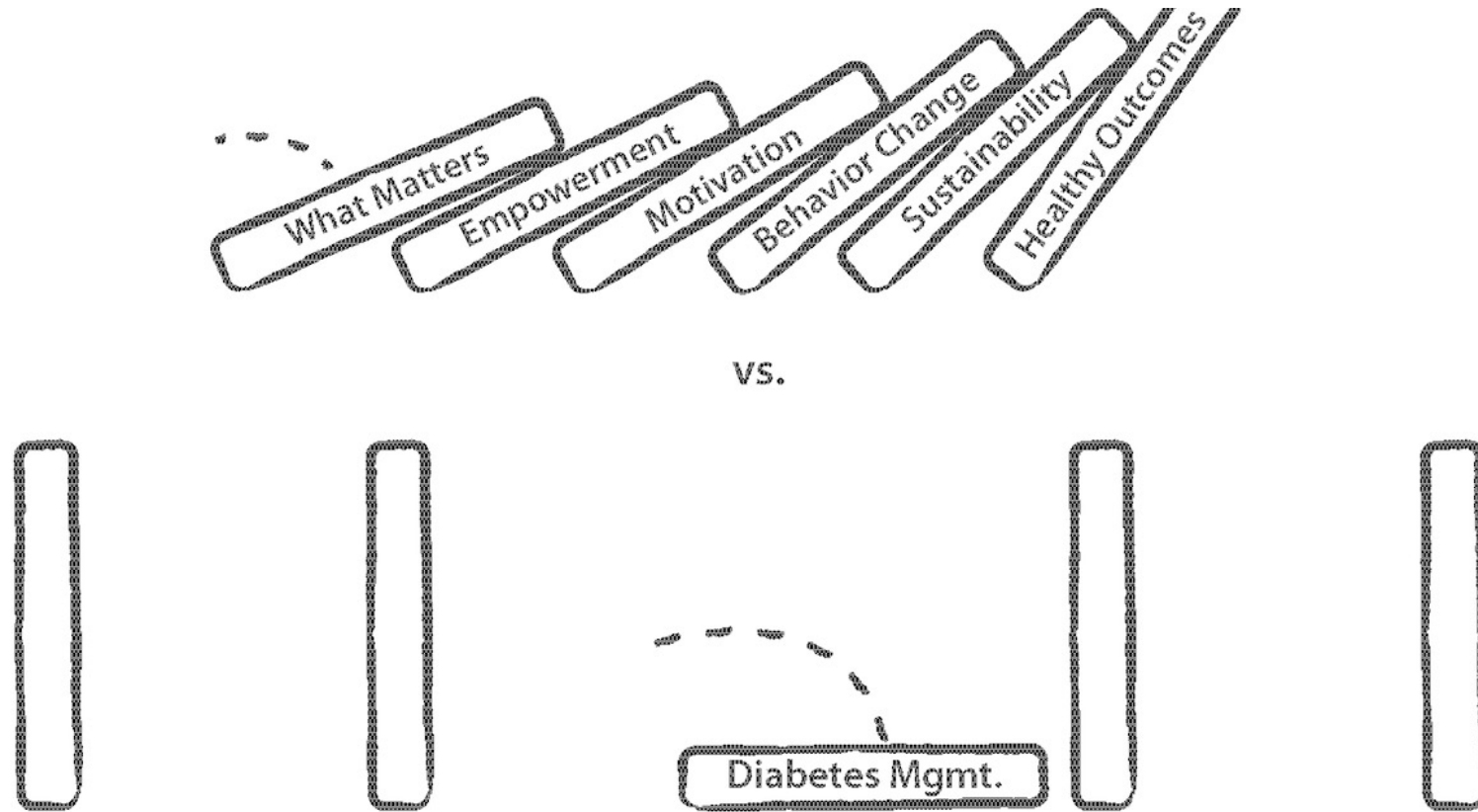


Changing the conversation for our
Veterans:

What do you want your health for?



What Matters and Why?



The definition of hell is a place where nothing connects with nothing.

-T.S. Eliot-

"CIRCLE OF HEALTH"



U.S. Department
of Veterans Affairs

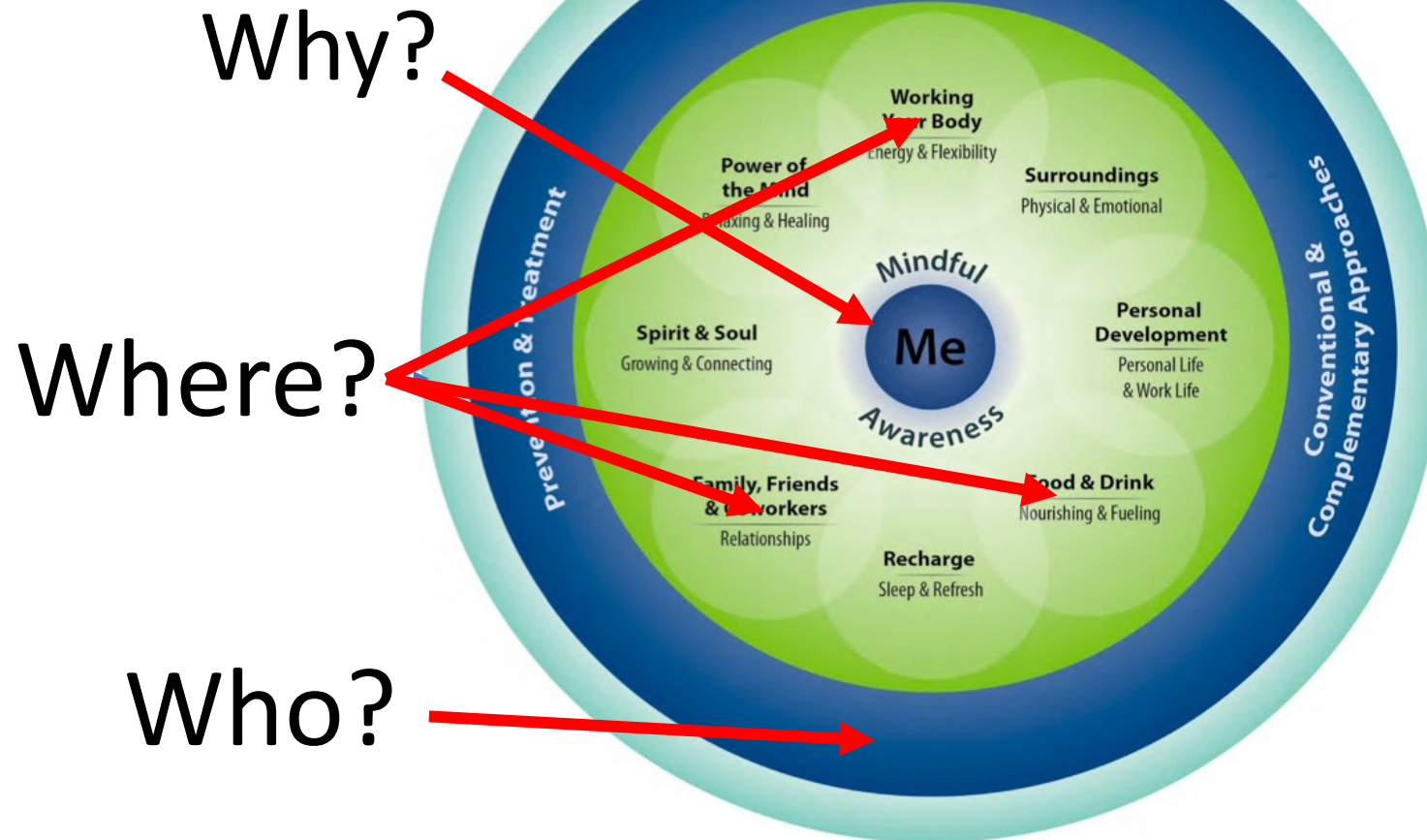
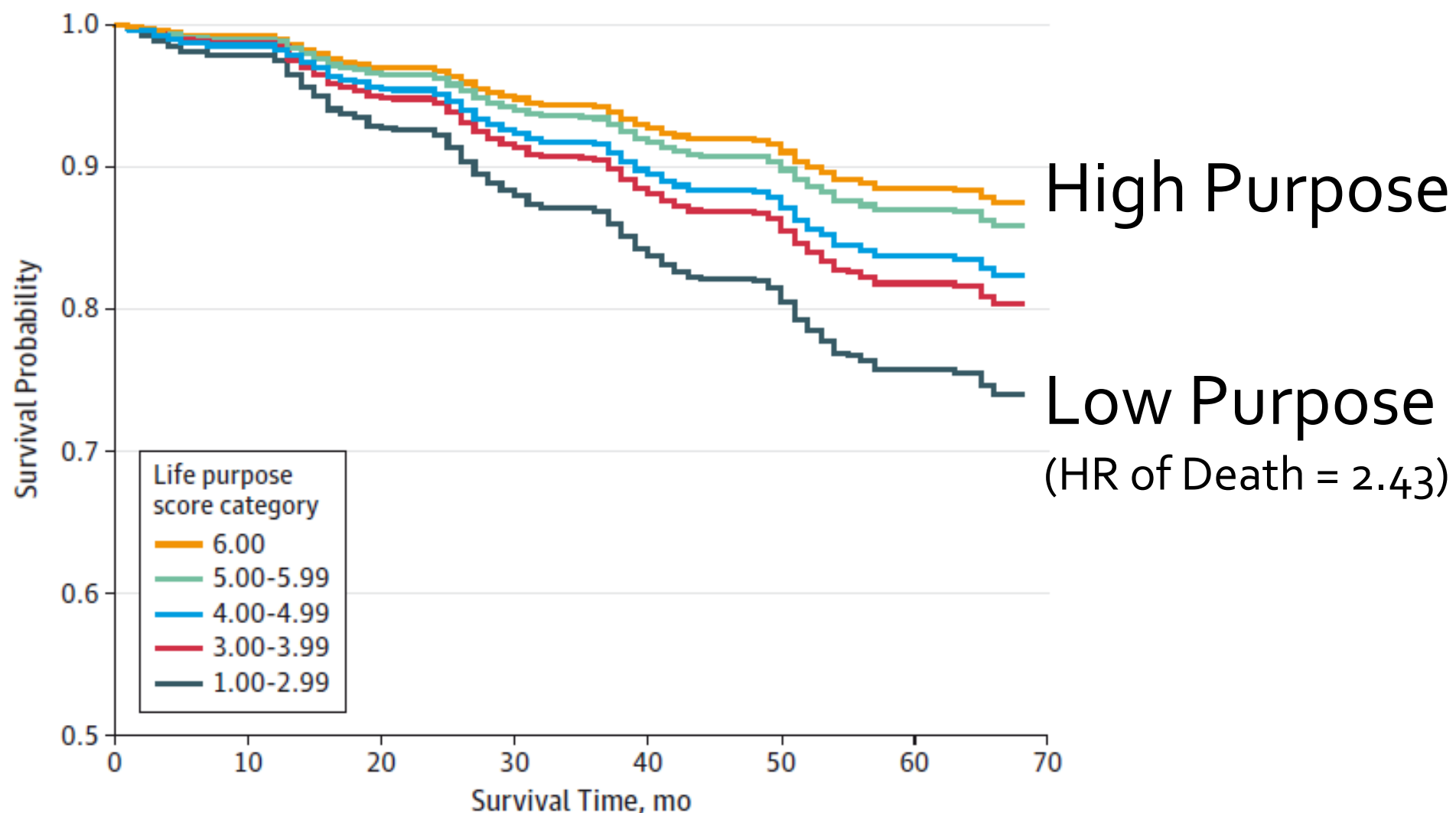


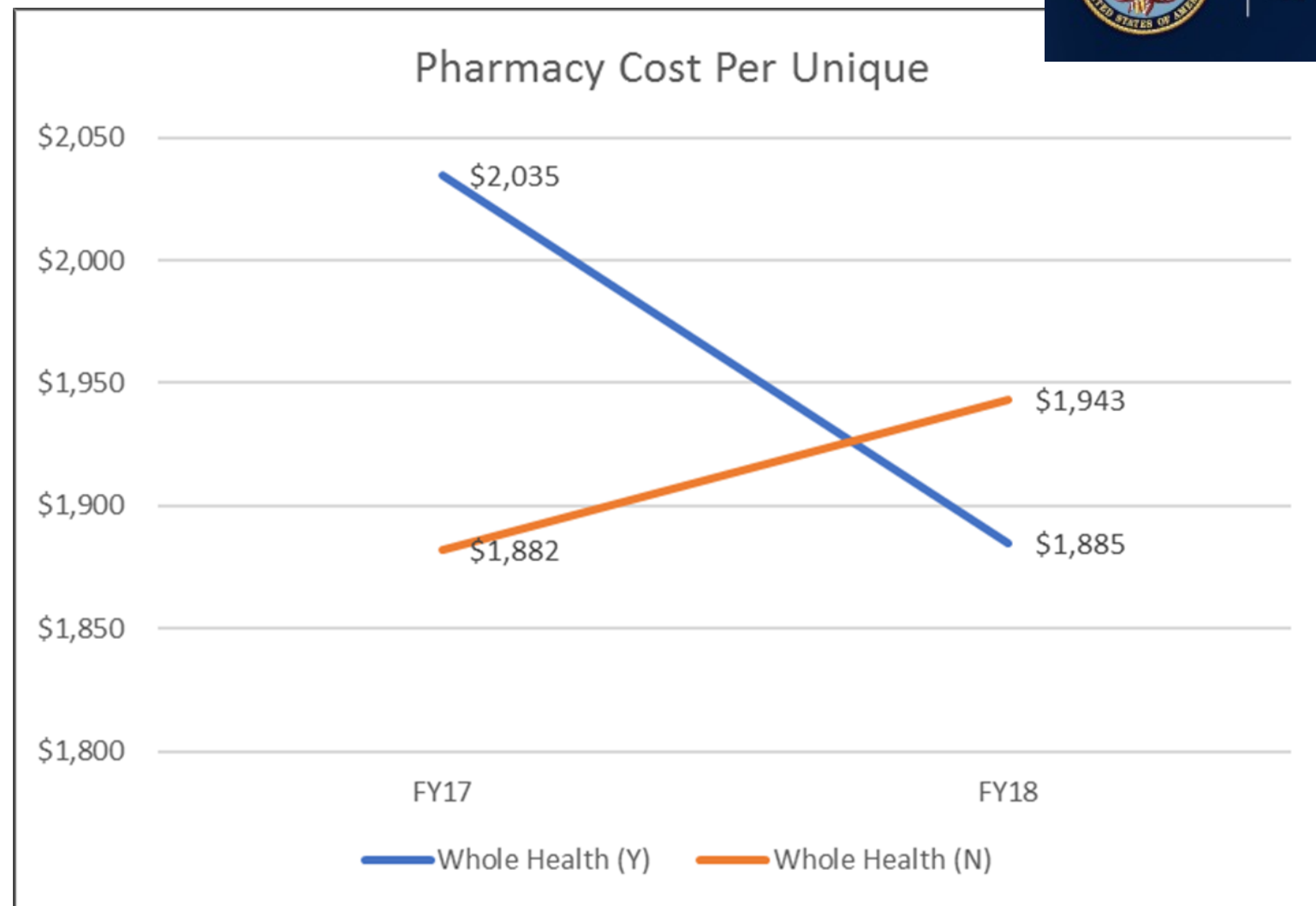
Figure. Survival Curves Illustrating the Association Between Life Purpose and Mortality



Alimujiang A, et al. Association Between Life Purpose and Mortality Among US Adults Older than 50 Years. JAMA Open. 2(5):2019

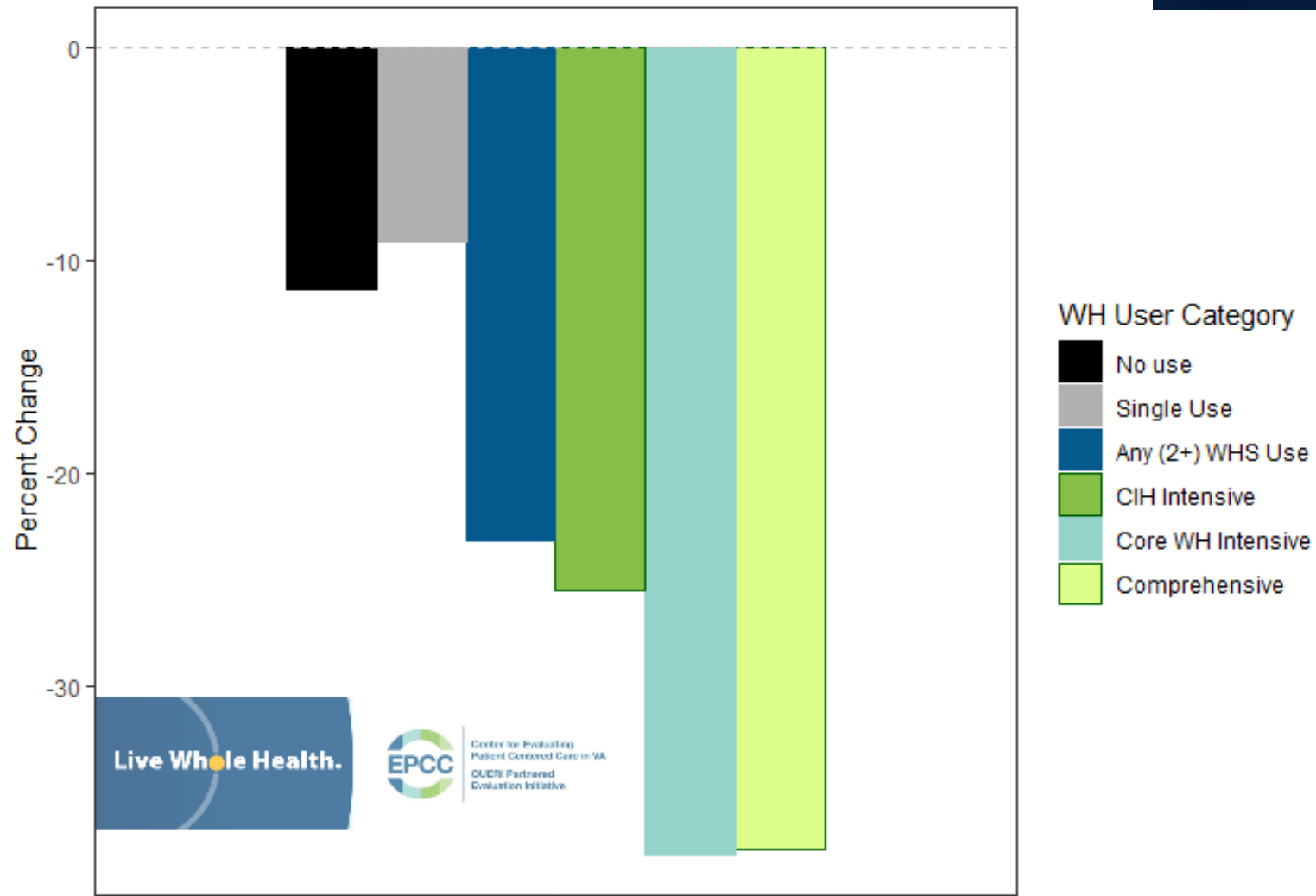


FY 17-18 Pharmaceutical Costs



WH Cohorts
FY17 N= 57,459
FY18 N= 77,009

PRELIMINARY FLAGSHIP OUTCOMES: OPIOID UTILIZATION



Change in opioid use by WH user category for Veterans with chronic pain (n=114357)

<https://www.va.gov/wholehealth/>

Personal Health Inventory



U.S. Department
of Veterans Affairs

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Whole Health

Whole Health

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Discover What Matters

Find out how you can be at the center of your care.

[Learn more »](#)

[Read Veteran Stories](#)[Discover What Matters](#)[Getting Started](#)

QUICK LINKS

Live Whole Health.



U.S. Department of Veterans Affairs
Veterans Health Administration

PERSONAL HEALTH INVENTORY

Use this circle to help you think about your whole health.

- "Me" at the center of the circle. This represents what is important to you in your life, and may include your mission, aspirations, or purpose. Your care focuses on you as a unique person.
- Mindful awareness is about noticing what is happening when it happens.
- Your everyday actions make up the green circle. Your options and choices may be affected by many factors.
- The next ring is professional care (tests, medications, treatments, surgeries, and counseling). This section includes complementary approaches like acupuncture and yoga.
- The outer ring includes the people, places, and resources in your community. Your community has a powerful influence on your personal experience of health and well-being.



Rate where you feel you are on the scales below from 1-5, with 1 being not so good, and 5 being great.

Physical Well-Being

1 NOT SO GOOD 2 3 4 5 GREAT

Mental/Emotional Well-Being

1 NOT SO GOOD 2 3 4 5 GREAT

Life: How is it to live your day-to-day life?

1 NOT SO GOOD 2 3 4 5 GREAT

What matters most to you in your life right now? Write a few words to capture your thoughts:

Live Whole Health.



18 10 930 81 2022 PAGE 14

Where You Are and Where You Would Like to Be

For each area below, consider "Where you are" and "Where you want to be." Write in a number between 1 (low) and 5 (high) that best represents where you are and where you want to be. You do not need to be a "5" in any of the areas now, nor even wish to be a "5" in the future.

Building Blocks of Health and Well-being	Where I am Now (1-5)	Where I Want to Be (1-5)
Moving the Body: Our physical, mental, and emotional health are impacted by the amount and kind of movement we do.		
Recharge: Our bodies and minds need rest in order to optimize our health. Recharging also involves activities that replenish your mental and physical energy.		
Food and Drink: What we eat, and drink can have a huge effect on how we experience life, both physically and mentally.		
Personal Development: Our health is impacted by how we spend our time. We feel best when we can do things that really matter to us or bring us joy.		
Family, Friends, and Co-Workers: Our relationships, including those with pets, have as significant an effect on our physical and emotional health as any other factor associated with well-being.		
Spirit and Soul: Connecting with something greater than ourselves may provide a sense of meaning and purpose, peace, or comfort. Spiritual connection can take many forms.		
Surroundings: Surroundings include where we live, work, learn, play, and worship—both indoors and out. Safe, stable, and comfortable surroundings have a positive effect on our health.		
Power of the Mind: Our thoughts are powerful and can affect our physical, mental, and emotional health. Changing our mindset can aid in healing and coping.		
Professional Care: Partnering with your health care team to address your health concerns, understand care options, and define actions you may take to promote your health and goals.		

Reflections

Now that you have thought about what matters to you in all of these areas, what would your life look like if you had the health you want? What kind of activities would you be doing? Or how might you feel different? What area might you focus on?

What might get in the way? How might you start?

After completing the Personal health inventory, talk to a friend, a family member, your health coach, a peer, or someone on your health care team about areas you would like to explore further. Or visit www.va.gov/wholehealth.

You can now add Patient Goals to the top of the Problem List in our Health Record

Problem List

 Create Patient Care Coordination Note

 Add

Diagnosis ▼

Patient Goal

▶ Patient Life Goal: Climb Mt. Kilimanjaro

Cardiovascular

▶ Hypertension goal BP (blood pressure) < 120/80

▶ CAD (coronary artery disease)

 Overview MI in 2000 Care Plan: ▪ if chest pain develops again, need to call clinic immediately

Endocrine

▶ Type 2 diabetes, HbA1C goal < 7%

 Overview diagnosed 11/26/2012 with A1C of 11 and glucose of ~500. Family Hx: father had diabetes

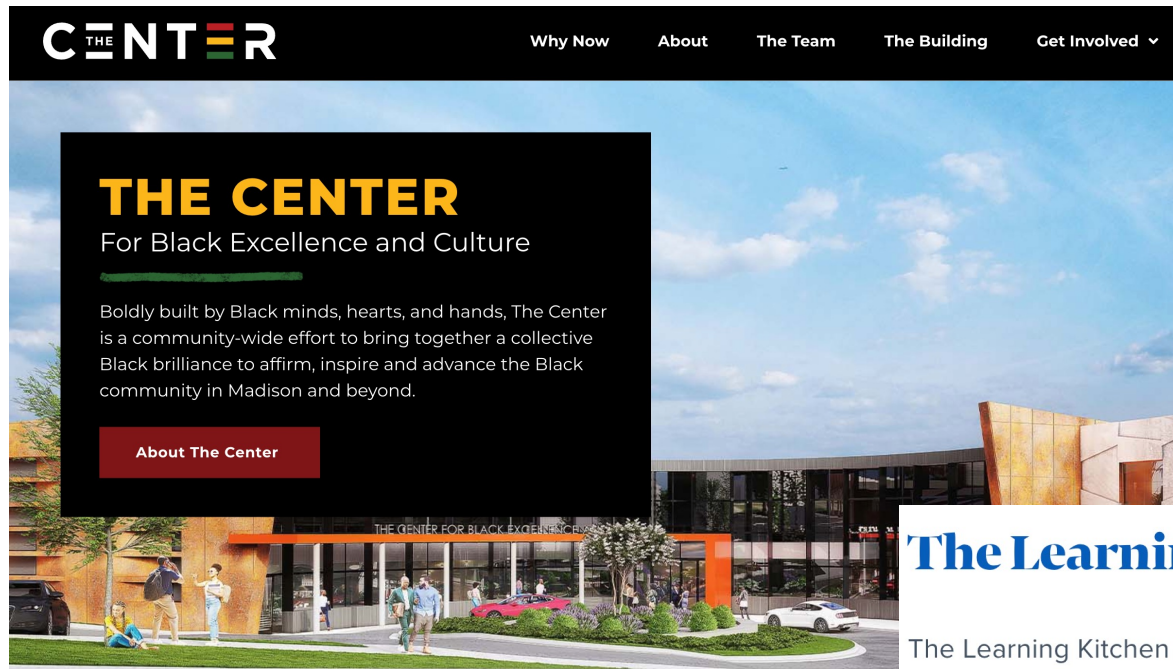
Other Examples of Salutogenic Science in Action...

- IORA Health: 1:4 Physician to health coach ratio =  40% hospitalizations,  35% in ED visits.
- Keiser Permanente: ACE questionnaire with compassionate inquiry =  30% in seeking medical help

Primary Care Foundation

- Reduces fear through ongoing trusting relationships
- Incorporates context of the non-physical
- The only part of health care that improves health outcomes and health equity (NASEM Report, 2021)
- Results in a 15-fold return on investment
- Is a required ingredient to achieve a better balance between pathogenesis and salutogenesis

Salutogenesis Centers.....



The Learning Kitchen

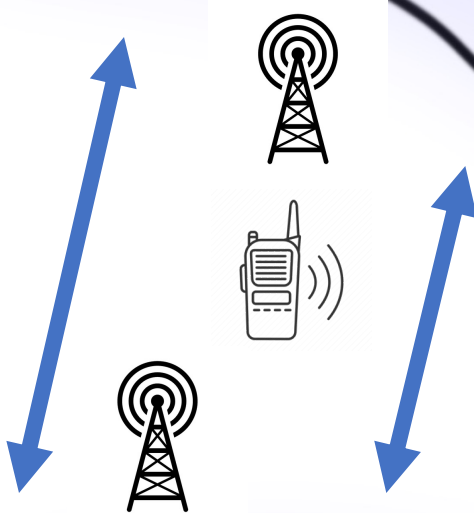
The Learning Kitchen at East Madison Hospital is a fully-equipped classroom kitchen maintained by culinary and health care professionals who offer a wide variety of cooking classes for our community and our patients. The kitchen includes a four-top gas range with flattop and oven, refrigerator, microwave oven and a full set of cooking supplies.



Access

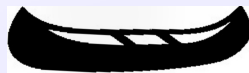


Fee For Service



Improved Health
Outcomes

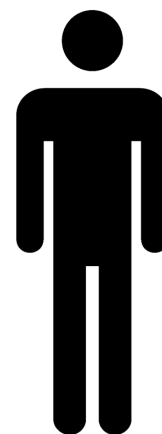
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Value

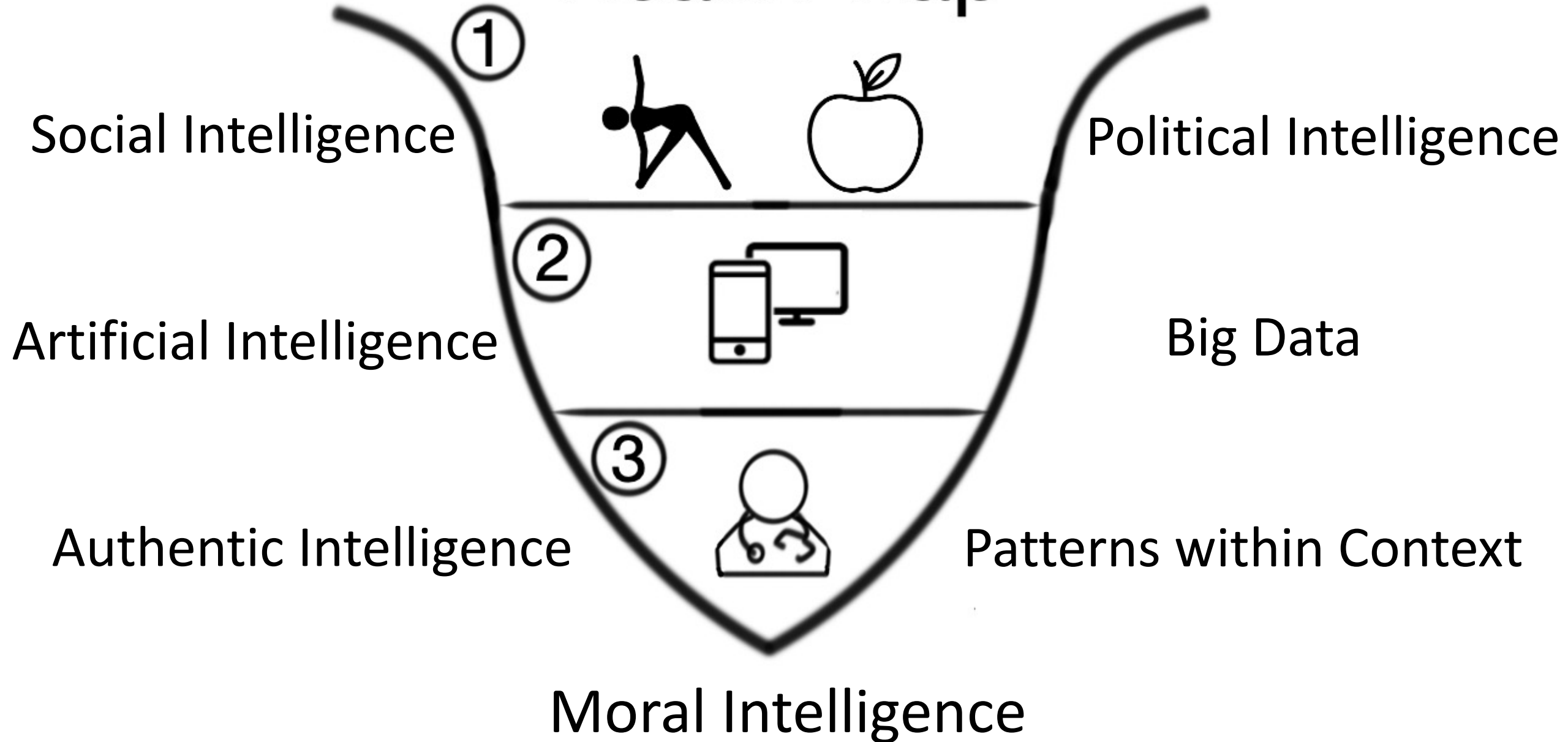


What about Joe?



A to B to C

Health Trap



When the fabric of communities upon which health depends is torn, then healers are called to mend it. The moral law within insists so.

-Don Berwick



Thank you for going
deeper into
Salutogenic Science!